



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Peggy J. Farnham, et al.

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Examiner: Sean E. Aeder

Title: LIVER TUMOR MARKER SEQUENCES

File No.: 960296.98750

DECLARATION UNDER 37 C.F.R. §1.132

Commissioner For Patents  
Alexandria, VA 22313-1450

Dear Sir:

I, Peggy J. Farnham, on oath say and declare that:

1. I am the same Peggy J. Farnham who is one of the named inventors of the above-identified patent application. I am currently employed as a Professor of Medical Pharmacology and Toxicology at University of California-Davis (UC-Davis). Before joining the faculty of UC-Davis, I was a Professor of Oncology at McArdle Laboratory for Cancer Research at University of Wisconsin-Madison. I obtained my Ph.D degree in Molecular Biophysics and Biochemistry in 1982 from Yale University and had my postdoctoral training at Stanford University. A copy of my Curriculum Vitae is attached as Exhibit A.

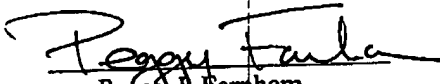
2. I have reviewed the Office Action issued in this matter by the U.S. Patent and Trademark Office on January 6, 2006. I understand that claims 11-16 are rejected for the alleged lack of utility and enablement, in part because the Examiner believes that the protein expression level may not correlate with the mRNA level. This Declaration is submitted to provide experimental evidence that the protein defined by SEQ ID NO:4 overexpressed in the liver cancer tissue at the protein level in comparison to the normal liver tissue.

BEST AVAILABLE COPY

3. At my direction, and under my supervision, members of my laboratory conducted Western blot analysis of three different pairs of liver tumor tissue and normal adjacent tissue from three different liver cancer patients for the expression of the protein defined by SEQ ID NO:4. Protein samples from the above tissues were analyzed using a 4-20% gradient SDS-PAGE and probed with a monoclonal antibody raised against the protein defined by SEQ ID NO:4. The protein defined by SEQ ID NO:4 runs as a dimer of about 100 Kd in SDS-PAGE reducing gels when DTT or BME is present. As shown in Fig. 1 attached, the protein defined by SEQ ID NO:4 expressed at a much higher level in the liver tumor tissues in comparison to the corresponding normal liver tissues.

4. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated this 29 day of March, 2006.

  
Peggy J. Farnham,

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**EXHIBIT A**  
**CURRICULUM VITAE**

**PEGGY FARNHAM, PH.D.**

**PROFESSOR OF MEDICAL PHARMACOLOGY AND TOXICOLOGY**

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**FORMAL EDUCATION:**

B.A. with Honors, Biochemistry, Rice University, Houston, Texas, 1978  
Ph.D., Molecular Biophysics and Biochemistry, Yale University, New Haven, Connecticut, 1982.

**POSITIONS HELD:**

NIH Predoctoral Trainee, Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, Connecticut, 1978-1982.  
Damon Runyon-Walter Winchell Postdoctoral Fellow, Department of Genetics Stanford University, Stanford, California, 1982-1983.  
NIH Postdoctoral Fellow, Department of Biological Sciences, Stanford University, Stanford, California, 1983-1986.  
Assistant Professor of Oncology, McArdle Laboratory for Cancer Research, University of Wisconsin, Madison, Wisconsin, 1987 to 1992.  
Associate Professor of Oncology, McArdle Laboratory for Cancer Research, University of Wisconsin, Madison, Wisconsin, 1992 to 1997.  
Chair, Cellular and Molecular Biology Ph.D. Degree Program University of Wisconsin, Madison, Wisconsin, 1996 to 2002  
Professor of Oncology, McArdle Laboratory for Cancer Research, University of Wisconsin, Madison, Wisconsin, 1997 to 2004  
Professor of Medical Pharmacology and Toxicology, University of California, Davis, California, 2004-present

**AWARDS AND HONORS**

NIH Predoctoral Trainee, 1978-1982.  
Damon Runyon-Walter Winchell Postdoctoral Fellow, 1982-1983.  
NIH Postdoctoral Fellow, 1983-1986.  
Outstanding Mentor in the U.W. Medical School, 1997, 1998  
Vilas Associates Award, 1999-2000.  
Associate Editor, Journal of Biological Chemistry, 2001-present  
Secretary, American Society of Biochemistry and Molecular Biology, 2004-present

## SELECTED PUBLICATIONS

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